

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

19270 U.S.PTO  
10/727870  
  
1204103

Applicant: Lopez de Cardenas et al.

Attorney Docket No.: 68.0425

Serial No.:

Art Unit:

Filed:

Examiner:

For: Real Time Optimization Of Well Production Without Creating Undue Risk Of Formation Instability

Mail Stop: Patent Application  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**CERTIFICATE OF MAILING**

I hereby certify that this Fee Calculation Sheet (in duplicate) is being deposited with the United States Postal Service as Express Mail No. EV 335 954 045 US in an envelope addressed to: Mail Stop: Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Joanne C. Hyland  
Joanne Hyland

12/4/03  
Date

Joanne C. Hyland  
Schlumberger Technology Corporation  
14910 Airline Road  
Rossharon, Texas 77583-1590

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Lopez de Cardenas et al.

Attorney Docket No.: 68.0425

Serial No.:

Art Unit:

Filed:

Examiner:

For: Real Time Optimization Of Well Production Without Creating Undue Risk Of Formation Instability

Mail Stop: Patent Application  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**CERTIFICATE OF MAILING**

I hereby certify that this Statement Under 37 CFR 3.73(b) is being deposited with the United States Postal Service as Express Mail No. EV 335 954 045 US in an envelope addressed to: Mail Stop: Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Joanne C. Hyland  
Joanne Hyland

12/4/03  
Date

Joanne C. Hyland  
Schlumberger Technology Corporation  
14910 Airline Road  
Rosharon, Texas 77583-1590

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Lopez de Cardenas et al. Attorney Docket No.: 68.0425

Serial No.: Art Unit:

Filed: Examiner:

For: Real Time Optimization Of Well Production Without Creating Undue Risk Of Formation Instability

Mail Stop: Patent Application  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**CERTIFICATE OF MAILING**

I hereby certify that this Power of Attorney is being deposited with the United States Postal Service as Express Mail No. EV 335 954 045 US in an envelope addressed to: Mail Stop: Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Joanne Hyland  
Joanne Hyland

12/4/03  
Date

Joanne C. Hyland  
Schlumberger Technology Corporation  
14910 Airline Road  
Rosharon, Texas 77583-1590

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Lopez de Cardenas et al.

Attorney Docket No.: 68.0425

Serial No.:

Art Unit:

Filed:

Examiner:

For: Real Time Optimization Of Well Production Without Creating Undue Risk Of Formation Instability

Mail Stop: Patent Application  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**CERTIFICATE OF MAILING**

I hereby certify that the Recordation Form Cover Sheet and Assignment are being deposited with the United States Postal Service as Express Mail No. EV 335 954 045 US in an envelope addressed to:  
Mail Stop: Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Joanne Hyland  
Joanne Hyland

12/4/03  
Date

Joanne C. Hyland  
Schlumberger Technology Corporation  
14910 Airline Road  
Rossharon, Texas 77583-1590

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Lopez de Cardenas et al.

Attorney Docket No.: 68.0425

Serial No.:

Art Unit:

Filed:

Examiner:

For: Real Time Optimization Of Well Production Without Creating Undue Risk Of Formation Instability

Mail Stop: Patent Application  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**CERTIFICATE OF MAILING**

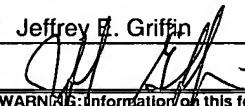
I hereby certify that these drawings are being deposited with the United States Postal Service as Express Mail No. EV 335 954 045 US in an envelope addressed to: Mail Stop: Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Joanne Hyland  
Joanne Hyland

12/4/03  
Date

Joanne C. Hyland  
Schlumberger Technology Corporation  
14910 Airline Road  
Rosharon, Texas 77583-1590

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

<b>FEE TRANSMITTAL For FY 2003</b>  <i>Effective 01/01/2003. Patent fees are subject to annual revision.</i>		<i>Complete if Known</i>																																														
		Application Number																																														
		Filing Date																																														
		First Named Inventor		Lopez de Cardenas et al.																																												
		Group Art Unit																																														
Examiner Name																																																
<b>TOTAL AMOUNT OF PAYMENT</b>		\$1180		Attorney Docket Number		68.0425																																										
<b>METHOD OF PAYMENT</b> (Check all that apply)		<b>FEE CALCULATION</b> (continued)																																														
1. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge indicated fees and credit any over payments to:		<b>3. ADDITIONAL FEES</b>																																														
Deposit Account Number		50-0457																																														
Deposit Account Name		Schlumberger Technology Corp.																																														
<input checked="" type="checkbox"/> Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17																																																
2. <input type="checkbox"/> Payment Enclosed:																																																
<input type="checkbox"/> Check <input type="checkbox"/> Money Order <input type="checkbox"/> Other																																																
<b>FEE CALCULATION</b>																																																
<b>1. BASIC FILING FEE</b>																																																
<table border="1"> <thead> <tr> <th>Large Entity Fee Code</th> <th>Fee (\$)</th> <th>Small Entity Fee Code</th> <th>Fee (\$)</th> <th colspan="3">Fee Description</th> </tr> </thead> <tbody> <tr> <td>1001</td> <td>770</td> <td>201</td> <td>385</td> <td colspan="3">Utility filing fee</td> </tr> <tr> <td>1002</td> <td>310</td> <td>206</td> <td>155</td> <td colspan="3">Design filing fee</td> </tr> <tr> <td>1003</td> <td>480</td> <td>207</td> <td>240</td> <td colspan="3">Plant Filing fee</td> </tr> <tr> <td>1004</td> <td>760</td> <td>208</td> <td>380</td> <td colspan="3">Reissue filing fee</td> </tr> <tr> <td>1005</td> <td>160</td> <td>214</td> <td>75</td> <td colspan="3">Provisional filing fee</td> </tr> </tbody> </table>							Large Entity Fee Code	Fee (\$)	Small Entity Fee Code	Fee (\$)	Fee Description			1001	770	201	385	Utility filing fee			1002	310	206	155	Design filing fee			1003	480	207	240	Plant Filing fee			1004	760	208	380	Reissue filing fee			1005	160	214	75	Provisional filing fee		
Large Entity Fee Code	Fee (\$)	Small Entity Fee Code	Fee (\$)	Fee Description																																												
1001	770	201	385	Utility filing fee																																												
1002	310	206	155	Design filing fee																																												
1003	480	207	240	Plant Filing fee																																												
1004	760	208	380	Reissue filing fee																																												
1005	160	214	75	Provisional filing fee																																												
<b>SUBTOTAL (1)</b> <u>\$770</u>																																																
<b>2. EXTRA CLAIMS</b>																																																
<table border="1"> <thead> <tr> <th>Total Claims</th> <th>Extra</th> <th>Fee from below</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr> <td>31</td> <td>-20 =</td> <td>11</td> <td>\$18.00 = \$198</td> </tr> <tr> <td>5</td> <td>-3 =</td> <td>2</td> <td>\$86.00 = \$172</td> </tr> </tbody> </table>							Total Claims	Extra	Fee from below	Fee Paid	31	-20 =	11	\$18.00 = \$198	5	-3 =	2	\$86.00 = \$172																														
Total Claims	Extra	Fee from below	Fee Paid																																													
31	-20 =	11	\$18.00 = \$198																																													
5	-3 =	2	\$86.00 = \$172																																													
<table border="1"> <thead> <tr> <th>Large Entity Fee Code</th> <th>Fee (\$)</th> <th>Small Entity Fee Code</th> <th>Fee (\$)</th> <th colspan="3">Fee Description</th> </tr> </thead> <tbody> <tr> <td>1202</td> <td>18</td> <td>2202</td> <td>9</td> <td colspan="3">Claims in excess of 20</td> </tr> <tr> <td>1201</td> <td>86</td> <td>2201</td> <td>43</td> <td colspan="3">Independent claims in excess of 3</td> </tr> <tr> <td>1203</td> <td>290</td> <td>2203</td> <td>145</td> <td colspan="3">Multiple dependent claims</td> </tr> <tr> <td>1204</td> <td>84</td> <td>2204</td> <td>39</td> <td colspan="3">**Reissue independent claims over original patent</td> </tr> <tr> <td>1205</td> <td>18</td> <td>2205</td> <td>9</td> <td colspan="3">**Reissue claim in excess of 20 and over original patent</td> </tr> </tbody> </table>							Large Entity Fee Code	Fee (\$)	Small Entity Fee Code	Fee (\$)	Fee Description			1202	18	2202	9	Claims in excess of 20			1201	86	2201	43	Independent claims in excess of 3			1203	290	2203	145	Multiple dependent claims			1204	84	2204	39	**Reissue independent claims over original patent			1205	18	2205	9	**Reissue claim in excess of 20 and over original patent		
Large Entity Fee Code	Fee (\$)	Small Entity Fee Code	Fee (\$)	Fee Description																																												
1202	18	2202	9	Claims in excess of 20																																												
1201	86	2201	43	Independent claims in excess of 3																																												
1203	290	2203	145	Multiple dependent claims																																												
1204	84	2204	39	**Reissue independent claims over original patent																																												
1205	18	2205	9	**Reissue claim in excess of 20 and over original patent																																												
<b>SUBTOTAL(2)</b> <u>\$370</u>																																																
Other fee (specify) _____																																																
Other fee (specify) _____																																																
<b>SUBTOTAL(3)</b> <u>\$40</u>																																																
*Reduced by Basic Filing Fee Paid																																																
<b>SUBMITTED BY</b>					Complete (if applicable)																																											
Typed or Printed Name		Jeffrey E. Griffin			Reg. Number	36,534																																										
Signature					Deposit Account User ID																																											

**WARNING:** Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you are required to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Please type a plus sign (+) in this box ➔ 

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

<b>UTILITY PATENT APPLICATION TRANSMITTAL</b> <i>(Only for new nonprovisional applications under 37 CFR 1.53 (b))</i>		<b>Attorney Docket No.:</b> 68.0425 <b>First Named Inventor or Application Identifier:</b> Lopez de Cardenas et al. <b>Title:</b> Real Time Optimization Of Well Production Without Creating Undue Risk Of Formation Instability <b>Express Mail Label No.:</b> EV 335 954 045 US
<b>APPLICATION ELEMENTS</b> <i>See MPEP chapter 600 concerning utility patent application contents.</i>		<b>ADDRESS TO:</b> Mail Stop: Patent Application Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450
1. <input checked="" type="checkbox"/> Fee Transmittal Form (e.g., PTO/SB/17) <i>(Submit an original and duplicate for fee processing)</i> 2. <input checked="" type="checkbox"/> Specification [Total Pages: 15] - Descriptive title of the Invention - Cross Reference to Related Applications - Statement Regarding Fed-sponsored R & D - Reference to sequence listing, a table, or a computer program listing appendix - Background of the Invention - Brief Summary of the Invention - Brief Descriptions of the Drawings ( <i>if filed</i> ) - Detailed Description - Claim(s) - Abstract of the Disclosure 3. <input checked="" type="checkbox"/> Drawings (35 U.S.C. 113) [Total Sheets: 6] 4. Oath or Declaration [Total Pages: 5] a. <input checked="" type="checkbox"/> Newly executed (original or copy) b. <input type="checkbox"/> Copy from prior application (37 CFR 1.63 (d)) <i>(for continuation/divisional with Box 16 completed)</i> i <input type="checkbox"/> <b>DELETION OF INVENTOR(S)</b> Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b).		5. <input type="checkbox"/> CD-ROM or CD-R in duplicate, large table or Computer Program (Appendix) 6. <input type="checkbox"/> Nucleotide and/or Amino Acid Sequence Submission ( <i>if applicable, all necessary</i> ) a. <input type="checkbox"/> Computer Readable Copy b. <input type="checkbox"/> Paper Copy c. <input type="checkbox"/> Statement verifying identity of above copies
<b>ACCOMPANYING APPLICATION PARTS</b>		
7. <input checked="" type="checkbox"/> Assignment papers (cover sheet & document(s)) 8. <input checked="" type="checkbox"/> 37 C.F.R. 3.73(b) Statement <input checked="" type="checkbox"/> Power of Attorney ( <i>when there is an assignee</i> ) 9. <input type="checkbox"/> English Translation Document ( <i>if applicable</i> ) 10. <input type="checkbox"/> Information Disclosure <input type="checkbox"/> Copies of IDS Statement (IDS)/Form 1449 Citations 11. <input type="checkbox"/> Preliminary Amendment 12. <input checked="" type="checkbox"/> Return Receipt Postcard (MPEP 503) <i>(Should be specifically itemized)</i> 13. <input type="checkbox"/> Certified Copy of Priority Document(s) ( <i>if foreign priority is claimed</i> ) 14. <input type="checkbox"/> Nonpublication Request under 35 U.S.C.122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 15. <input type="checkbox"/> Other: _____		

**16. If a CONTINUING APPLICATION, check appropriate box and supply the requisite information below and in a preliminary amendment:**

Continuation     Divisional     Continuation-in-part (CIP)    of prior application No.: \_\_\_\_\_ / \_\_\_\_\_  
 Prior application information: Examiner: \_\_\_\_\_ Group/Art Unit: \_\_\_\_\_

For CONTINUATION or DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 4b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

**17. CORRESPONDENCE ADDRESS**

<input type="checkbox"/> Customer Number or Bar Code Label	(Insert customer No. or Attach bar code label here)			or <input checked="" type="checkbox"/> Correspondence address below	
<b>NAME</b>	Jeffrey E. Griffin				
	Schlumberger Technology Corporation, Schlumberger Reservoir Completions				
<b>ADDRESS</b>	14910 Airline Road				
	P.O. Box 1590				
<b>CITY</b>	Rosharon	<b>STATE</b>	Texas	<b>ZIP CODE</b>	77583-1590
<b>COUNTRY</b>	U.S.	<b>TELEPHONE</b>	(281) 285-5720	<b>FAX</b>	(281) 285-5537
Name (Print/Type)	Jeffrey E. Griffin			Registration No. (Attorney/Agent): 36,534	
Signature				Date: 12/4/03	

This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you are required to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.